Working Title of the Dissertation **Intrusion Detection Using SNORT**

1. **Hypothesis:** Deploying an Intrusion Detection System (IDS) using SNORT can significantly enhance the detection of vulnerabilities and intrusions in near real-time within a modern information environment.

2. **The Problem / Short Description of Idea:** The increasing sophistication of cyberattacks demands advanced mechanisms for early detection of vulnerabilities. Current intrusion detection methods often lack scalability and adaptability to evolving threats. This project aims to set up and configure SNORT, a robust IDS, to address these challenges effectively.

3. **The Project Aim(s):** To research and understand the current state of the art in intrusion detection systems. To implement and configure SNORT as an IDS in a laboratory environment. To evaluate the effectiveness of the IDS using datasets collected before and after its deployment.

4. **The Project Objectives:** Investigate the requirements of a modern information environment concerning intrusion detection. Set up and configure SNORT in a controlled lab environment. Collect, analyze, andcompare datasets to evaluate the IDS's performance. Document the setup process and findings comprehensively.

5. **How You Plan to Conduct Research:** Conduct a literature review to identify the state-of-the-art practices in intrusion detection. Configure SNORT using laboratory resources. Simulate various intrusion scenarios and collect data for analysis. Analyze the performance of SNORT based on predefined metrics.

6. **Project Plan**: Phase 1: Literature review and requirement gathering (Week 1-2). Phase 2: Setup and configuration of SNORT (Week 3-4). Phase 3: Experimentation and data collection (Week 5-6). Phase 4: Data analysis and evaluation (Week 7-8). Phase 5: Documentation and final report (Week 9-10).